



STATE OF NEW YORK  
DEPARTMENT OF HEALTH  
ALBANY

DAVID AXELROD, M.D.  
COMMISSIONER

December 11, 1984

Dear Chairman Palladino:

We in New York State have been confronted with two recent incidents involving contamination of sewage treatment facilities with Americium 241. In both cases the radioactive material was released to the sewer system by companies engaged in the manufacture of components for smoke detectors.

Both companies -- EAD Metallurgical, Inc. and NRD, Inc. -- were licensed by the State Department of Labor for use of radioactive materials and were subject to discharge limits established by the State and the federal Nuclear Regulatory Commission.

While liability in these cases is still to be determined, it is apparent that discharges in accordance with the current regulatory limits can result in concentrations of Am-241 in the sludge or ash produced by a sewage treatment plant at levels that require appropriate environmental control. While these two incidents have not resulted in serious health impact, they will require costly remedial action.

The potential for reconcentration of radionuclides through modern sewage treatment technology is not unique to these two sites. In our view, this phenomenon warrants a re-evaluation of existing discharge limits taking into account potential exposure pathways resulting from reconcentration. The two New York incidents also have raised major questions regarding the ultimate disposal of sludge and ash contaminated with radioactive material.

I am hereby requesting the NRC to re-examine the discharge limits in Part 20 and to develop criteria for addressing sewer lines, sewage treatment plants and landfills that have already been contaminated with material discharged to the sanitary sewer system in compliance with the current limits. The potential inhalation dose resulting from the incineration of sludge bearing I-131 also should be considered.

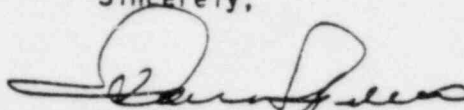
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EDO --- 000227

- 2 -

NRC staff is aware of these problems and we appreciate the assistance and guidance they continue to provide.

Sincerely,

A handwritten signature in dark ink, appearing to read 'David Axelrod', written over a horizontal line.

David Axelrod, M.D.  
Commissioner of Health

Muzio J. Palladino  
Chairman  
Nuclear Regulatory Commission  
177 H Street Northwest  
Washington, D.C. 20555



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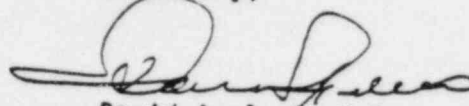
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David Axelrod, M.D.  
Commissioner of Health

Nunzio J. Palladino  
Chairman  
Nuclear Regulatory Commission  
1717 H Street Northwest  
Washington, D.C. 20555

NUMBER: 84-2064

OFFICE OF THE SECRETARY

LOGGING DATE: 12/21/84

ACTION OFFICE: EDO

AUTHOR: David Axelrod

AFFILIATION: Dept of Health  
State of New York

LETTER DATE: 12/11/84

FILE CODE:

ADDRESSEE: Palladino

SUBJECT: Ref incidents involving contamination of sewage treatment  
fac w/Americium 241--req Comm re-examine discharge limit  
under Pt 21

ACTION: Appropriate

DISTRIBUTION: RF

SPECIAL HANDLING: None

SIGNATURE DATE:

FOR THE COMMISSION: Billie

Rec'd CIL EDO  
Date.... 12-25-84  
Time.... 2:25